A.D. 1807 N° 3061.

SPECIFICATION

OF

JAMES BRADLY.

HOLLOW FIRE BAR FOR FURNACES, &c.

LONDON:
PRINTED BY GEORGE E. EYRE AND WILLIAM SPOTTISWOODE,
PRINTERS TO THE QUEEN'S MOST EXCELLENT MAJESTY:
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Price 8d.
1855.

A.D. 1807 N° 3061.

Hollow Fire Bar for Furnaces, &c.

BRADLY'S SPECIFICATION.

TO ALL TO WHOM THESE PRESENTS SHALL COME, I, JAMES BRADLY, of Maid Lane, Southwark, in the County of Surry, Ironfounder, do send greeting.

WHEREAS His most Excellent Majesty King George the Third, by His Letters Patent under the Great Seal of the United Kingdom of Great Britain and Ireland, bearing date at Westminster, the Thirteenth day of July, in the forty-seventh year of His reign, did give and grant unto me, the said James Bradly, my executors, administrators, and assigns, His special licence, full power, sole privilege and authority, that I, the said James Bradly, my executors, administrators, and assigns, during the term of years therein expressed, should and lawfully might make, use, exercise, and vend, within England, Wales, and the Town of Berwick-upon-Tweed, my new invented "IRON BAR TO BE USED IN FIRE PLACES FOR BOILERS, FURNACES, HOTHOUSES, AND ANY OTHER FIRE PLACE WHERE BARS ARE USED;" in which Letters Patent there is contained a proviso obliging me, the said James Bradly, under my hand and seal, to cause a particular description of the nature of my said Invention, and in what manner the same is to be performed, to be inrolled in His Majesty's High Court of Chancery within one calendar month next and immediately after the date of the said recited Letters Patent, as in and by the same (relation being thereunto had) may more fully and at large appear.

NOW KNOW YE, that in compliance with the said proviso, I, the said James Bradly, do hereby declare that my said Invention is described as follows, that is to say:—

My said Invention of a new kind of iron bar to be used in fire places for boilers, furnaces, hothouses, or any other fire place where iron bars are used consists in making the same hollow instead of solid, and in leaving them open from one end to the other, so that air may pass through them, and this I perform by casting them in the way that hollow things are usually cast, and of any required shape or form, but the form which I prefer, and the dimensions in general use for large fire places, are described in the margin hereof. Care should be taken in placing these bars in the fire place so that the air may have free entrance and exit at both ends, by which means they will be kept cooler than solid bars, and will not be subject to be burnt and wasted like them from violent heat; but in case these bars should be placed by accident or the carelessness or designs of the workmen so that their ends might become closed with morter or other substance, I make them with a hole or holes on each side and at opposite ends or at the lower edge of each bar, so that the air may be freely admitted into them through these openings. The advantage of making furnace bars hollow, so that the air may have a free passage through them, is considerable, for, independent of their being capable by this means of enduring a greater degree of heat than solid ones without injury, they will last longer, will in a great degree prevent the coals from burning to clinkers, and may be afforded for the same and perhaps less cost in the first instance.

Reference to the Drawings.

Fig. 1, longitudinal view of a bar 24 inches long. *a*, a hole in one side about one inch diameter. A similar hole is made on the other side at the opposite end.

Fig. 2, end view of a hollow bar, with the usual dimensions, one 24 inches long.

In witness whereof, I have hereunto set my hand and seal, this Thirteenth day of August, in the year of our Lord One thousand eight hundred and seven.

JAMES (L.S.) BRADLY.

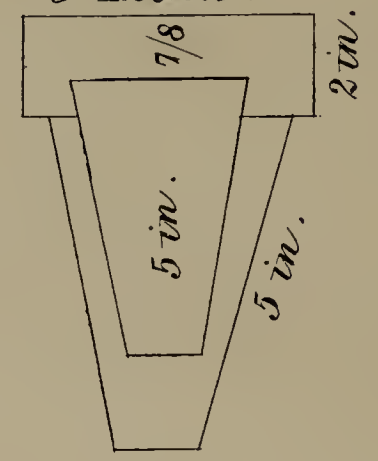
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(1 SHEET.)

FIG. 1.



FIG. 2.



The enrolled drawing is partly colored.

Drawn on Stone by Malby & Sons

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Printers to the Queen's most Excellent Majesty. 1855.

Bradly's new Invented Hollow Fire Bar for Furnaces, &c.

AND BE IT REMEMBERED, that on the Thirteenth day of August, in the forty-seventh year of the reign of His Majesty King George the Third, the said James Bradly came before our said Lord the King in His Chancery, and acknowledged the Instrument aforesaid, and all and every thing therein contained and specified, in form above written. And also the Instrument aforesaid was stamped according to the tenor of the Statute made in the forty-fourth year of His said Majesty's reign.

MORRIS,

Inrolled the Thirteenth day of August, One thousand eight hundred and seven.

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